

The disclosure for the amendments that the sheet and the resin if extruded into a 0.125 inch thick sheet, has a Haze number as determined by ASTM D103 of at least 90% is on page 28 lines 23 to 25; an opacity as determined by ASTM D20805-80 would be at least 10%, a minimum surface roughness of 0.5 um to 30 um as measured using ASTM methods B46.11 B361.2 and Y14.36 is on page 13 lines 9 to 14; and a Total White Light Transmission of greater than 78.9 measured by a Hunterlab colorimeter_D25 model using ASTM E1331 and ASTM E1163 is on page 21 lines 21-22 and in the Example III-B which is a white agglomerate at the TWLT value of 78.9.

The claims stand under rejection and objection for various reasons.

Claims 1-14, and 16-17 are rejected under 35 U.S.C.'O. 102(b) as being anticipated by US487631 (Hennig).

The Examiner contends:

"Hennig et al. teaches an opaque synthetic resin that is useful for the formation of shaped and extended articles (column 2, lines 42-44). This opaque synthetic resin comprises a polymer matrix that contains crosslinked polymeric beads (column 2, lines 58-60). The polymer beads comprise 9.9-59.9% by weight of a monomer such as styrene (column 2, lines 63-64 and column 3, lines 10-43), 40-90% by weight of a second polymer such as methyl-methacrylate (column 2, lines 66-67, and column 3 line 67-column 4 line 10), .1-20% by weight of a crosslinking monomer such as divinyl-benzene and allyl-methacrylate (column 3, lines 1-2, and column 4, lines 11-34). The particles have an

average particle size between 5-50 microns (column 3, lines 5-7). The polymer matrix comprises acrylic resins, particularly acrylic resins including methyl-methacrylate (column 6, lines 4-8). Most preferably, the polymer matrix and the polymer beads differ in refractive index by .04 (column 5, lines 64-68). Hennig et al. further discloses a polymeric article that is comprised of a mixture of the aforementioned polymeric particles and polymeric matrix. The particles are dispersed within the matrix and then formed into an extended article via extrusion (column 6, lines 8-32). The polymeric particle/matrix composite is 70-99% by weight of the polymer matrix mixed with 1-30% by weight of the polymeric particles (column 7-13, claim 1).

Although Hennig et al. does not explicitly disclose that the extrusion formed polymeric article described in his specification has a frosted or surface textured finish, the examiner takes the position that these features will necessarily be present. The applicant states in the specification that the requirements for a frosted finish and surface textured article are that "The frosted appearance of the thermoplastic compositions is achieved through the mismatch of the refractive indexes, $\Delta n > 0.02$, of the fine particles and the thermoplastic matrices. The surface texture is controlled by the degree of crosslinking and mean size of the fine particles." (page 3, lines 26-31). The invention described by Hennig et al. clearly meets the refractive index limitation as stated above. In addition to claiming that the particles are crosslinked, the particles described by Hennig et al. can contain up to 20% by weight of a crosslinking agent, leading the examiner to believe that the particles would be "highly" crosslinked. Further, the extruded article described by Hennig et al. clearly meets all of the compositional

limitations set forth by the applicant both for the polymeric articles and the extruded article."

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over US487631 (Hennig) as evidenced by US6077575 (Minghetti).

The Examiner contents:

"Hennig et al. teaches all of the limitations required by claim 15 except for those listed below.

Hennig et al. does not teach the incorporation of a colorant within the polymeric particles.

Although Hennig et al. does not disclose that a colorant may be added to the polymeric particle composition, the examiner takes the position that this is a design choice. It has been shown that the addition of a colorant to particles formed in a similar manner to those described by Hennig et al. is known, as evidenced by Minghetti, column 5, lines 35-36. Further, it is well known to add a colorant to any material in order to improve its aesthetic appeal.

Therefore it would have been obvious to one with skill in the art at the time the invention was made to incorporate a colorant into the polymeric particles described by Hennig et al.

One would have been motivated to make this modification because of the improved aesthetic appeal of the resulting article one would expect to gain as a result."

Applicants have again reviewed the references cited and again assert that the cited references do not teach the claimed invention.

Hennig teaches an opaque plastic which is used for a projection screen. Hennig does not take into consideration a textured surface or translucency, which is the key point of the present invention. The particle size range given by Hennig would give a glossy surface, which is undesirable for frosted or textured applications. In addition, the smaller particles disclosed by Hennig would not possess the mar/scratch resistance of the present invention.

Minghetti does not teach adding colorants to suspension particles to achieve the textured surface and frosted appearance of the present invention.

The Examiner has responded to this argument by stating:

"These arguments are not persuasive. In response to the argument that Hennig does not take into consideration translucency, the examiner respectfully points out to the applicant that in all of the pending claims, no level of translucency is required. Thus, this argument is moot."

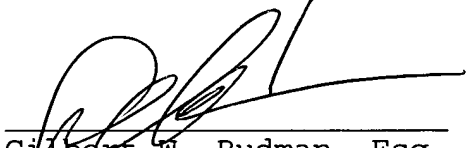
In response the Applicant has amended all the independent claims to require that 0.125 inch thick extruded sheet comprised of the composition of the present invention have a Total White Light Transmission (translucency) of greater than 78.9 measured by a Hunterlab colorimeter_D25 model using ASTM E1331 and ASTM E1163.

Additionally, the Applicant has also inserted limitations related to opacity, haze and surface roughness. The Applicant is not aware of any prior art reference, or combination of references, that teach, disclose or make

obvious a composition that can be used to product an article having the combination of these properties.

Since the Applicant believes that present claims are directed to patentable subject matter and are written in the proper matter, the Applicant requests reconsideration and allowance of the claims.

Respectfully submitted,



Gilbert W. Rudman, Esq.
Attorney for the Applicants
Reg. No. 27,589

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ATOFINA Chemicals, Inc.
Patent Department - 26th Floor
2000 Market Street
Philadelphia, PA 19103-3222
Tel (215) 419-7636
Fax (215) 419-7075

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Attachment: Clean Version of Proposed Amended Claims